

Lepidocyclina (Lepidocyclina) pancanalis Vaughan and Cole, n.sp.

Figs. 1-6.—Surface views, $\times 12$, of six specimens.

Fig. 7.—Vertical section, $\times 28$.

Fig. 8.—A part of a vertical section, $\times 200$, to show the stoloniferous apertures in the walls of the equatorial chambers. Three pairs of the apertures are represented by the pairs of white dots.

Fig. 9.—Equatorial section, $\times 28$, to show the embryonic and equatorial chambers.

The horizon in Antigua is in the Antigua formation, but it may be considerably above the base of the formation.

Collateral information on the probable correlation of the Panama exposure above discussed may be obtained by comparing it with the exposure at locality 6024 of MacDonald's report (1919, p. 540). The two are very near together. At this locality the following species were collected:

In the lower 10 ft. *Camerina panamensis* (Cushman)

Miogypsina (Miolepidocyclina) panamensis (Cushman)

In the upper 10 ft. *Stylophora imperatoris* Vaughan²

macdonaldi Vaughan²

Acropora panamensis Vaughan³

saludensis Vaughan³

There are two other groups of facts that bear on the stratigraphic position of the exposure at locality 6025. The first of them is that at MacDonald's locality 6026 (1929, p. 541) there is an Antiguan middle Oligocene coral fauna. A species of *Camerina* was doubtfully identified as *C. panamensis*. In the Panama Canal Zone *L. canellei* and *L. vauhani* occur in association (Vaughan, 1923, pp. 254, 255), but in Antigua, *L. vauhani* occurs in association with *L. pancanalis*. Specimens previously reported by the senior author as *L. canellei* from Half Moon Bay, have proved in detailed study to be *L. pancanalis*. The second group of facts is that *Miogypsina cushmani* occurs in the vicinity of Culebra in both the upper part of the Culebra formation and in the immediately overlying Emperador limestone.

Notwithstanding lack of the desired definiteness in the information given above, the indications are that the stratigraphic position of the bed exposed at locality 6025 is about the same as the beds exposed at Half Moon Bay, Antigua, but below the horizon of *Miogypsina cushmani* in the upper part of the Culebra formation as that formation was exposed in Gaillard Cut before water was let into the Panama Canal. As the beds at Half Moon Bay occur within the Antigua formation, but apparently not in its basal part, the stratigraphic position of the bed exposed at locality 6025 in Panama is Oligocene, perhaps upper rather than middle. The European age equivalent is probably Chattian.

LITERATURE CITED

- MACDONALD. 1919. *The sedimentary formations of the Panama Canal Zone, with special reference to the stratigraphic relations of the fossiliferous beds.* U. S. Nat. Mus. Bull. 103: 525-45, pls. 153, 154.
- VAUGHAN, THOMAS WAYLAND. 1919a. *Fossil corals from Central America, Cuba, and Porto Rico, with an account of the American Tertiary, Pleistocene, and Recent coral reefs.* U. S. Nat. Mus. Bull. 103: 189-524, pls. 68-152.

² Also in the Emperador limestone which overlies the Culebra formation.

³ Also in the middle Oligocene, Antigua formation at Rife Butts, Antigua (see Vaughan, 1919a, pp. 201, 208, 209).

- VAUGHAN, THOMAS WAYLAND. 1919b. *The biologic character and geologic correlation of the sedimentary formations of Panama in their relation to the geologic history of Central America and the West Indies*. U. S. Nat. Mus. Bull. **103**: 547-612.
- VAUGHAN, THOMAS WAYLAND, 1923. *Studies of the larger Tertiary foraminifera from tropical and subtropical America*. Nat. Acad. Sci., Proc., **9**: no. 7, 253-57.
- VAUGHAN, THOMAS WAYLAND, 1924. *American and European Tertiary larger foraminifera*. Geol. Soc. Amer., Bull., **35**: 785-822, pls. 30-36.

ENTOMOLOGY.—*A new species of Rhodnius from Panama (Hemiptera: Reduviidae)*.¹ H. G. BARBER, Bureau of Entomology.
(Communicated by HAROLD MORRISON.)

Rhodnius pallescens n. sp.

Color: Pale testaceous, dull, marked with fuscous. Head beneath and laterally, before the eyes, and a narrow longitudinal stripe behind the eyes on a line with the ocelli, fuscous; a conspicuous, narrow, median, longitudinal, pale testaceous line running from extreme apex to base of head, somewhat widened between the eyes. Antennae with the first segment, a little over basal half of second, and most of the fourth, except at extreme base and apex, pale testaceous, often faintly mottled with fuscous; the remainder infuscated. Rostrum sordid testaceous, faintly mottled with brown. Pronotum conspicuously marked with pale testaceous on a fuscous background; lateral margins and two longitudinal carinae, one on either side of the middle, very plainly calloused, pale testaceous; the anterior lobe between the two median carinae with two elongate, oval, unbroken fuscous spots, anteriorly narrowed and not attaining the depressed anterior margin; just within the anterior angles a small, subtriangular, fuscous spot, behind which is a broken fascia, of the same color, occupying the space on each side between the lateral margin and the median carina; posterior lobe granulose, with many pale testaceous pustules on a fuscous background; a median, longitudinal, testaceous, slightly calloused, granulated stripe between the two median carinae, and a broader, more irregular, non-calloused fascia on each side between the lateral margin and the median carina. Scutellum pale testaceous, disk with three distinctly excavated fuscous spots basally, the median one frequently immaculate, the inclined sides infuscated to beyond the middle. Hemelytra with the surface for the most part pale testaceous, with the veins concolorous; median or inner field of the corium with a conspicuous, broad, slightly curved, fuscous stripe; a much narrower and less conspicuous stripe contiguous to and paralleling the submedian nervure; sometimes also the claval suture anteriorly, and extreme apex of corium, infuscated. The membrane pale, sordid testaceous, with the outer long cell, except along the limiting veins, faintly embrowned, with pale irrorations through the center, the inner long cell very slightly embrowned before the middle; the surface posterior to the long cells frequently irrorated or tinted with brown. The connexivum pale testaceous, each segment anteriorly at the lateral margin with an elongate, rectangular fascia, over twice as wide as long and narrowly separated from a more elongate narrower stripe, partially concealed by the margin of the corium. Pleura fuscous, granulose, broadly and irregularly striped, and mottled with testaceous. Venter embrowned, with two or three longitudinal series of irregular

¹ Received August 15, 1932.

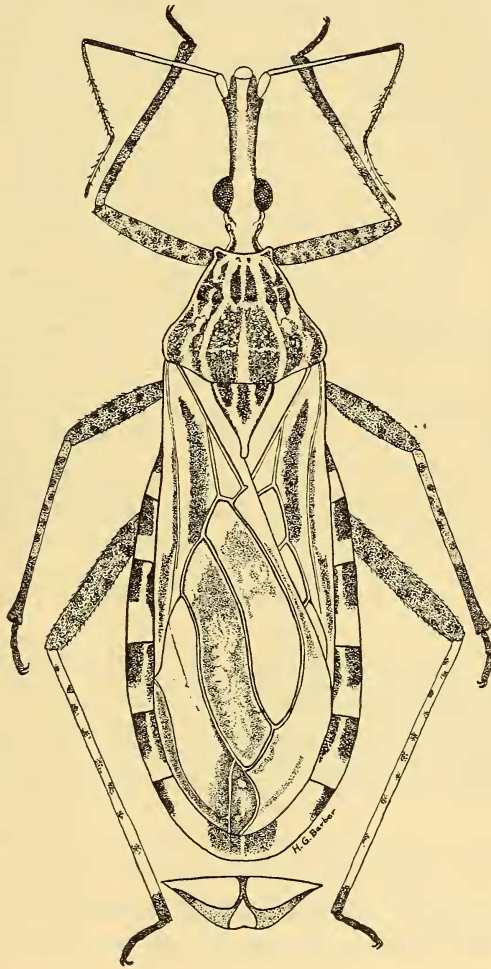


Fig. 1.—*Rhodnius pallescens* n. sp.